

SEQUENCE LISTING

<110> JAPAN SCIENCE AND TECHNOLOGY AGENCY
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 SATO, Moritoshi

<120> PROBE FOR DETECTING NUCLEAR RECEPTOR AGONIST OR ANTAGONIST AND
 METHOD FOR SCREENING AGONIST OR ANTAGONIST TO NUCLEAR RECEPTOR
 WITH THE USE OF THE SAME

<130> 2006_1324A

<140> US 10/589,255

<141> 2007-01-18

<150> PCT/JP2005/002660

<151> 2005-02-14

<150> JP 2004-035678

<151> 2004-02-12

<160> 11

<170> PatentIn version 3.3

<210> 1

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (2)..(3)

<223> Xaa can be any amino acid

<400> 1

Leu Xaa Xaa Leu Leu
 1 5

<210> 2

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<212> PRT

<213> Homo sapiens

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<309> 2003-12-22

<313> (687)..(697)

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His Lys Ile Leu His Arg Leu Leu Gln Glu Gly
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<309> 2003-05-21

<313> (1)..(238)

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Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
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Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
20 25 30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
35 40 45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
50 55 60

Leu Thr Trp Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys
65 70 75 80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
85 90 95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
100 105 110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
115 120 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
130 135 140

Asn Tyr Ile Ser His Asn Val Tyr Ile Thr Ala Asp Lys Gln Lys Asn
145 150 155 160

Gly Ile Lys Ala Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
165 170 175

Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
180 185 190

Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Tyr Gln Ser Ala Leu
195 200 205

Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe
210 215 220

Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys
225 230 235

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Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
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Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
20 25 30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
35 40 45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
50 55 60

Phe Gly Tyr Gly Leu Gln Cys Phe Ala Arg Tyr Pro Asp His Met Lys
65 70 75 80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
85 90 95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
100 105 110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
115 120 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
130 135 140

Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn
145 150 155 160

Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
Page 3

165 170 175
 Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
 180 185 190
 Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Tyr Gln Ser Ala Leu
 195 200 205
 Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe
 210 215 220
 Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys Ser
 225 230 235 240
 Gly Leu Arg Ser Thr Gly Ser Arg
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His Thr Lys Lys Asn Ser Pro Ala Leu Ser Leu Thr Ala Asp Gln Met
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 Val Ser Ala Leu Leu Asp Ala Glu Pro Pro Leu Ile Tyr Ser Glu Tyr
 20 25 30
 Asp Pro Ser Arg Pro Phe Ser Glu Ala Ser Met Met Gly Leu Leu Thr
 35 40 45
 Asn Leu Ala Asp Arg Glu Leu Val His Met Ile Asn Trp Ala Lys Arg
 50 55 60
 Val Pro Gly Phe Gly Asp Leu Asn Leu His Asp Gln Val His Leu Leu
 65 70 75 80
 Glu Cys Ala Trp Leu Glu Ile Leu Met Ile Gly Leu Val Trp Arg Ser
 85 90 95

Met Glu His Pro Gly Lys Leu Leu Phe Ala Pro Asn Leu Leu Leu Asp
100 105 110

Arg Asn Gln Gly Lys Cys Val Glu Gly Met Val Glu Ile Phe Asp Met
115 120 125

Leu Leu Ala Thr Ser Ser Arg Phe Arg Met Met Asn Leu Gln Gly Glu
130 135 140

Glu Phe Val Cys Leu Lys Ser Ile Ile Leu Leu Asn Ser Gly Val Tyr
145 150 155 160

Thr Phe Leu Ser Ser Thr Leu Lys Ser Leu Glu Glu Lys Asp His Ile
165 170 175

His Arg Val Leu Asp Lys Ile Asn Asp Thr Leu Ile His Leu Met Ala
180 185 190

Lys Ala Gly Leu Thr Leu Gln Gln Gln His Arg Arg Leu Ala Gln Leu
195 200 205

Leu Leu Ile Leu Ser His Ile Arg His Met Ser Asn Lys Gly Met Glu
210 215 220

His Leu Tyr Asn Met Lys Cys Lys Asn Val Val Pro Leu Tyr Asp Leu
225 230 235 240

Leu Leu Glu Met Leu Asp
245

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Gly Gly Asn Gly Gly
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His Lys Ile Ala His Arg Ala Ala Gln Glu Gly
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 <309> 1996-11-04
 <313> (235)..(505)

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Glu Ser Ala Asp Leu Arg Ala Leu Ala Lys His Leu Tyr Asp Ser Tyr
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Ile Lys Ser Phe Pro Leu Thr Lys Ala Lys Ala Arg Ala Ile Leu Thr
 20 25 30

Gly Lys Thr Thr Asp Lys Ser Pro Phe Val Ile Tyr Asp Met Asn Ser
 35 40 45

Leu Met Met Gly Glu Asp Lys Ile Lys Phe Lys His Ile Thr Pro Leu
 50 55 60

Gln Glu Gln Ser Lys Glu Val Ala Ile Arg Ile Phe Gln Gly Cys Gln
 65 70 75 80

Phe Arg Ser Val Glu Ala Val Gln Glu Ile Thr Glu Tyr Ala Lys Ser
 85 90 95

Ile Pro Gly Phe Val Asn Leu Asp Leu Asn Asp Gln Val Thr Leu Leu
 100 105 110

Lys Tyr Gly Val His Glu Ile Ile Tyr Thr Met Leu Ala Ser Leu Met
 115 120 125

Asn Lys Asp Gly Val Leu Ile Ser Glu Gly Gln Gly Phe Met Thr Arg
 130 135 140

Glu Phe Leu Lys Ser Leu Arg Lys Pro Phe Gly Asp Phe Met Glu Pro
 145 150 155 160

Lys Phe Glu Phe Ala Val Lys Phe Asn Ala Leu Glu Leu Asp Asp Ser
 165 170 175

Asp Leu Ala Ile Phe Ile Ala Val Ile Ile Leu Ser Gly Asp Arg Pro
180 185 190

Gly Leu Leu Asn Val Lys Pro Ile Glu Asp Ile Gln Asp Asn Leu Leu
195 200 205

Gln Ala Leu Glu Leu Gln Leu Lys Leu Asn His Pro Glu Ser Ser Gln
210 215 220

Leu Phe Ala Lys Leu Leu Gln Lys Met Thr Asp Leu Arg Gln Ile Val
225 230 235 240

Thr Glu His Val Gln Leu Leu Gln Val Ile Lys Lys Thr Glu Thr Asp
245 250 255

Met Ser Leu His Pro Leu Leu Gln Glu Ile Tyr Lys Asp Leu Tyr
260 265 270

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Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly Gly
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Gly Asn Gly Gly Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly
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<210> 10
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Phe Leu Asn Val Leu Glu Ala Ile Glu Pro Gly Val Val Cys Ala Gly
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His Asp Asn Asn Gln Pro Asp Ser Phe Ala Ala Leu Leu Ser Ser Leu
 20 25 30
 Asn Glu Leu Gly Glu Arg Gln Leu Val His Val Val Lys Trp Ala Lys
 35 40 45
 Ala Leu Pro Gly Phe Arg Asn Leu His Val Asp Asp Gln Met Ala Val
 50 55 60
 Ile Gln Tyr Ser Trp Met Gly Leu Met Val Phe Ala Met Gly Trp Arg
 65 70 75 80
 Ser Phe Thr Asn Val Asn Ser Arg Met Leu Tyr Phe Ala Pro Asp Leu
 85 90 95
 Val Phe Asn Glu Tyr Arg Met His Lys Ser Arg Met Tyr Ser Gln Cys
 100 105 110
 Val Arg Met Arg His Leu Ser Gln Glu Phe Gly Trp Leu Gln Ile Thr
 115 120 125
 Pro Gln Glu Phe Leu Cys Met Lys Ala Leu Leu Leu Phe Ser Ile Ile
 130 135 140
 Pro Val Asp Gly Leu Lys Asn Gln Lys Phe Phe Asp Glu Leu Arg Met
 145 150 155 160
 Asn Tyr Ile Lys Glu Leu Asp Arg Ile Ile Ala Cys Lys Arg Lys Asn
 165 170 175
 Pro Thr Ser Cys Ser Arg Arg Phe Tyr Gln Leu Thr Lys Leu Leu Asp
 180 185 190
 Ser Val Gln Pro Ile Ala Arg Glu Leu His Gln Phe Thr Phe Asp Leu
 195 200 205
 Leu Ile Lys Ser His Met Val Ser Val Asp Phe Pro Glu Met Met Ala
 210 215 220
 Glu Ile Ile Ser Val Gln Val Pro Lys Ile Leu Ser Gly Lys Val
 225 230 235

<210> 11
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Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly
1 5 10 15